



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,251	04/14/2004	Ian R. Ollmann	APL1P301/P3248	8088
63464 7590 02/02/2009 BEYER LAW GROUP LLP/APPLE INC. P.O. BOX 1687 CUPERTINO, CA 95015-1687				
EXAMINER				
TAN, ALVIN H				
ART UNIT		PAPER NUMBER		
2173				
MAIL DATE		DELIVERY MODE		
02/02/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/825,251

Applicant(s)

OLLMANN ET AL.

Examiner

ALVIN H. TAN

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-38 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1 and 3-38 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/CDC)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Remarks

1. Claims 1 and 3-38 have been examined and rejected. This Office action is responsive to the amendment filed on 10/27/08, which has been entered in the above identified application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5-23, 26, and 35-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Graham (U.S. Patent No. 7,228,492 B1).

Claims 1, 5-23, 26, 38 (Method)

Claim 35 (Computer Readable Medium)

Claim 36 (Apparatus)

Claim 37 (System)

3-1. Regarding claims 1, 35, 36, and 37, Graham teaches the claim comprising obtaining one or more location criteria to identify a plurality of desired locations in the file, by disclosing accepting user input indicating a user's specified concepts of interest *[column 2, lines 8-10]*.

Graham teaches identifying one or more display criteria to be used to designate the plurality of desired locations in a file to display their relative importance with respect to each other, by disclosing displaying a graphical representation of the presence of one or more concepts of interest to the user *[column 2, lines 25-27]*. Annotations may also be added to the document text to denote relevance to user-selected concepts of interest *[column 7, lines 21-23]*.

Graham teaches locating the plurality of desired locations in the file according to the one or more location criteria, by disclosing analyzing an electronically stored document to identify locations of discussion of the user-specified concept of interest *[column 2, lines 10-13]*.

Graham teaches determining relative importance of each one of the plurality of desired locations in the file with respect to each other, by disclosing that techniques for determining locations of concepts of interest can be used such as keyword counting and Bayesian analysis *[column 2, lines 13-19]*.

Graham teaches displaying a scroll bar, based on the relative importance, by applying the one or more display criteria to each one of a plurality of corresponding locations of the scroll bar corresponding to the plurality of desired locations in the file individually, wherein said displaying of the scroll bar displays each one of the plurality of

corresponding locations of the scroll bar to indicate the relative importance of content in each one of the plurality of desired locations in the file with respect to one another even though the content of the plurality of desired locations of the file are not displayed, by disclosing that the graphical representation can be an annotation contour that shows the concepts of interest in a scrollable bar [*column 4, lines 24-43; figure 1A*].

3-2. Regarding claim 5 and 6, Graham teaches the claim with respect to claim 1, wherein displaying the scroll bar further comprises applying a background display criteria to a plurality of locations of the scroll bar corresponding to remaining locations in the file that do not include the desire locations and displaying one or more of the plurality of locations in the file by applying the display criteria and the background display criteria, by disclosing displaying the annotation contour corresponding to concepts of interest in a document [*column 4, lines 14-18*]. Thus, parts of the document where there are no concepts of interest will not have a contour and just have a background color.

3-3. Regarding claim 7, Graham teaches the claim with respect to claim 6, wherein the plurality of desired locations of the file are a plurality of rows in the file, by disclosing that the annotation contour represents locations with the document [*column 4, lines 32-43*].

3-4. Regarding claim 8, Graham teaches the claim with respect to claim 1, further comprising displaying one or more of the plurality of locations in the file by applying the display criteria, by disclosing that the annotation contour represents locations with the document *[column 4, lines 32-43]*.

3-5. Regarding claim 9, Graham teaches the claim with respect to claim 8, wherein the plurality of locations are a plurality of rows in the file, by disclosing that the annotation contour represents locations with the document *[column 4, lines 32-43]*.

3-6. Regarding claim 10, Graham teaches the claim with respect to claim 1, further comprising displaying contents of the file by applying the display criteria, by disclosing that annotations are added to the document text to denote relevance to user-selected concepts of interest *[column 7, lines 21-23]*.

3-7. Regarding claim 11, Graham teaches the claim with respect to claim 1, wherein the location criteria is used to identify one or more errors, by disclosing receiving user input indicating user-specified concepts of interest *[column 7, lines 33-34]*. Thus, the user may submit any term or phrase such as "error".

3-8. Regarding claim 12, Graham teaches the claim with respect to claim 1, wherein the location criteria is used to identify one or more warnings, by disclosing receiving

user input indicating user-specified concepts of interest [column 7, lines 33-34]. Thus, the user may submit any term or phrase such as “warning”.

3-9. Regarding claim 13, Graham teaches the claim with respect to claim 1, further comprising obtaining one or more user-defined location criteria, by disclosing receiving user input indicating user-specified concepts of interest [column 7, lines 33-34].

3-10. Regarding claim 14, Graham teaches the claim with respect to claim 13, further comprising obtaining one or more user-defined display criteria, by disclosing a sensitivity control that allows the user to select the degree of sensitivity to apply in identifying potential locations of relevant discussion [column 6, lines 50-64].

3-11. Regarding claim 15, Graham teaches the claim with respect to claim 1, wherein the location criteria includes one or more rankings associated with one or more content-dependent criteria, by disclosing [figure 1A].

3-12. Regarding claim 16, Graham teaches the claim with respect to claim 1, wherein each of the one or more display criteria includes at least one of color, hue, intensity, and transparency, by disclosing [figure 1A; figure 5, “530b”].

3-13. Regarding claim 17, Graham teaches the claim with respect to claim 16, further comprising obtaining one or more user-defined display criteria, by disclosing receiving user input indicating user-specified concepts of interest *[column 7, lines 33-34]*.

3-14. Regarding claim 18, Graham teaches the claim with respect to claim 16, wherein each of the one or more display criteria is associated with one or more of the location criteria, by disclosing that the annotation contour represents locations with the document *[column 4, lines 32-43]*.

3-15. Regarding claim 19, Graham teaches the claim with respect to claim 18, further comprising obtaining one or more user-defined display criteria, by disclosing a sensitivity control that allows the user to select the degree of sensitivity to apply in identifying potential locations of relevant discussion *[column 6, lines 50-64]*.

3-16. Regarding claim 20, Graham teaches the claim with respect to claim 19, further comprising obtaining one or more user defined location criteria, by disclosing receiving user input indicating user-specified concepts of interest *[column 7, lines 33-34]*.

3-17. Regarding claim 21, Graham teaches the claim with respect to claim 1, further comprising obtaining one or more user-defined display criteria, by disclosing a sensitivity control that allows the user to select the degree of sensitivity to apply in identifying potential locations of relevant discussion *[column 6, lines 50-64]*.

3-18. Regarding claim 22, Graham teaches the claim with respect to claim 21, wherein each of the one or more display criteria is associated with one or more of the location criteria, by disclosing that the annotation contour represents locations with the document *[column 4, lines 32-43]*.

3-19. Regarding claim 23, Graham teaches the claim with respect to claim 1, wherein each of the one or more display criteria is associated with one or more of the location criteria, by disclosing that the annotation contour represents locations with the document *[column 4, lines 32-43]*.

3-20. Regarding claim 26, Graham teaches the claim with respect to claim 5, wherein the background display criteria includes at least one of color, hue, intensity, and transparency, by disclosing *[figure 1A]*.

3-21. Regarding claim 38, Graham teaches the claim with respect to claim 1, further comprising receiving a selection of a location of the scroll bar after the scroll bar is displayed, by disclosing that a page pointer may be moved to reposition a display to a corresponding location within the document *[column 4, lines 36-43]*.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 4, 24 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Graham (U.S. Patent No. 7,228,492 B1) and Eick (U.S. Patent No. 5,644,692).

Claims 3, 4, 24, 25

5-1. Regarding claim 3, Graham teaches the claim with respect to claim 1. Graham does not expressly teach wherein the scroll bar includes a plurality of horizontal segments, each of the horizontal segments indicating relative importance of contents in the corresponding locations of the displayed file. Eick discloses a scroll bar with markers indicating specific details of a document [*column 23, line 22 to column 24, line 14*]. As shown in [*figure 15*], horizontal markers may be used on a vertical scroll bar. This would allow the user to more easily relate the position of the markers with the corresponding position of the document. Since Graham discloses presenting a scroll bar with a graphical representation corresponding to sections of a document, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the annotation contour within the scroll bar of Graham in a vertical setting, as taught by Eick. This would allow the user to more easily relate the position of the markers with the corresponding position of the document.

5-2. Regarding claim 4, Graham and Eick teach the claim with respect to claim 3, wherein each of the plurality of horizontal segments is displayed with at least one of a color, hue, intensity, and transparency indicating its relative importance, because the annotation contour of Graham must have some sort of color. Additionally, Eick discloses using various colors for the markings [*Eick, column 24, lines 9-14*].

5-3. Regarding claim 24, Graham teaches the claim as recited in claim 5. Graham does not expressly teach the claim further comprising obtaining user-defined background display criteria. Eick discloses a scroll bar with markers indicating specific details of a document [*column 23, line 22 to column 24, line 14*]. Various types of attributes are associated with each line within a document by using a set of colors on the scroll bar [*column 27, lines 46-62*]. Conditional displays of an attribute are set up by specifying a foreground and background attribute type for the scroll bar [*column 28, lines 12-19, 36-44*]. This provides further information to a user regarding which portions of a document are related to a plurality of attribute values [*column 2, lines 18-27*]. Since Graham teaches a scroll bar for displaying relevant information about a document [*Graham, figure 1A*], it would have been obvious to one of ordinary skill in the art at the time the invention was made to include user-defined foreground and background display criteria for displaying portions of the scroll bar containing certain attributes, as taught by Eick. This provides further information to a user regarding which portions of a document are related to a plurality of attribute values.

5-4. Regarding claim 25, Graham and Eick teach the claim with respect to claim 24, wherein the background display criteria includes at least one of color, hue, intensity, and transparency because the default background for the scroll bar must have some sort of color. Additionally, markers indicating the attributes include lines of a different color or a color of the scroll bar [*Eick, column 24, lines 1-14*].

6. Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham (U.S. Patent No. 7,228,492 B1) and McGee, III et al (U.S. Patent No. 6,990,496 B1), herein after, McGee.

Claims 27-29

6-1. Regarding claim 27, Graham teaches the claim as recited in claim 1. Graham does not expressly teach the claim wherein locating one or more desired locations in the file according to the location criteria comprises determining a reference count for each row in the file, the reference count indicating a number of the desired locations in the corresponding row. McGee teaches a text classifier that reads text having one or more keywords contained within one or more segments within the text and in response to identifying at least one keyword within a line of text, classifying that line of text [*column 2, lines 36-42*]. As shown in [*figure 4*], the number of keywords in each line is determined. Classifying a line of text based on the number of keywords within it allows users to more easily identify segments of text within a document [*column 2, lines 14-22*].

Since Graham teaches a scroll bar for displaying relevant information about a document based on user input indicating a user-specified concept of interest [*Graham, column 7, lines 33-46*], it would have been obvious to one of ordinary skill in the art at the time the invention was made to include determining a reference count for each row in the document based on the query in order to classify each line, as taught by McGee. This would provide more detailed information concerning each row and thus, would allow users to more easily identify important sections of text within a document.

6-2. Regarding claim 28, Graham and McGee teach the claim with respect to claim 27, wherein displaying the scroll bar by applying the one or more display criteria to one or more locations of the scroll bar corresponding to the one or more desired locations in the file comprises applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the reference count for corresponding rows in the file, by disclosing using the technique of McGee [*McGee, column 2, lines 14-22*] as the technique for analyzing the document to determine locations of user-specified concept of interest of Graham [*Graham, column 2, lines 10-19*]. A graphical representation of the analysis will be displayed [*Graham, column 2, lines 25-32*].

6-3. Regarding claim 29, Graham and McGee teach the claim with respect to claim 28, further comprising displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the reference count for corresponding rows in the file, by

disclosing that the annotation contour represents locations with the document [*Graham, column 4, lines 32-43*].

7. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham (U.S. Patent No. 7,228,492 B1), McGee, III et al (U.S. Patent No. 6,990,496 B1), and Mohan et al (U.S. Patent No. 6,970,881 B1).

Claims 30, 31

7-1. Regarding claim 30, Graham and McGee teach the claim with respect to claim 28. Graham and McGee do not expressly teach the claim further comprising dividing the reference count for each row in the file by a total number of reference counts in the file to obtain a row reference count, normalizing the row reference count for each row in the file, and wherein applying the one or more display criteria to the one or more locations of the scroll bar includes applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the normalized row reference count for corresponding rows in the file. Mohan discloses categorizing and analyzing unstructured information such as documents [*column 1, lines 27-60; column 3, lines 10-25*] in order to provide an intelligent view of the unstructured information [*column 18, lines 5-12*]. Scores for individual key concepts that contributed to a search are averaged for each object returned. If the search was performed using a combination of key concepts and seed concepts, the number of hits for the seed concepts are divided by the total number of hits picked up for all seed concepts in the document to determine how much the seed

concept actually contributed to the concept of the document. This is used to obtain a relevancy score for the object as it pertains to a particular search [*column 18, lines 33-45*]. Scores are normalized as discussed in [*column 16, line 30 to column 17, line 15*]. Since Graham and McGee discloses classifying a line of text based on the number of keywords within it [*McGee, column 2, lines 36-42*] and displaying an annotation contour on a scroll bar [*Graham, figure 1A*] based on a relevancy classification [*Graham, column 2, lines 8-19*], it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use the method of determining a relevancy score, as taught by Mohan, on each row in the document. This would enable the user to view trends within each row of the document.

7-2. Regarding claim 31, Graham, McGee, and Mohan teach the claim with respect to claim 30, further comprising displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the normalized row reference count for corresponding rows in the file, by disclosing using a technique for analyzing the document to determine locations of user-specified concept of interest [*Graham, column 2, lines 10-19*] for the graphical representation [*Graham, column 2, lines 25-27*]. Since the relevance is determined by the method as taught by Mohan, the attribute would be displayed based on the normalized row reference count for corresponding rows.

8. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham (U.S. Patent No. 7,228,492 B1), McGee, III et al (U.S. Patent No. 6,990,496 B1), and Mohan et al (U.S. Patent No. 6,970,881 B1), and Kline ("Principles and Practice of Structural Equation Modeling", December 2002).

Claims 32-34

8-1. Regarding claim 32, Graham, McGee, and Mohan teach the claim as recited in claim 30. Graham, McGee, and Mohan do not expressly teach the claim further comprising applying a non-linear function to each normalized row reference count to generate a non-linear normalized row reference count for each row in the file wherein applying the one or more display criteria to the one or more locations of the scroll bar includes applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the non-linear normalized row reference count for corresponding rows in the file. Kline discloses correcting a positive and negative skew in data by applying a non-linear function to the data [*page 23, number 5; page 24, number 6*]. Preventing a positive and negative skew in a data set of row scores would provide a more even distribution of row scores across the whole document and thus, allow the even distribution of colors to represent scores on the scroll bar. Since Graham, McGee, and Mohan disclose determining the relevance of rows within a document and displaying a graphical representation on a scroll bar based on a classification [*Graham, column 2, lines 25-27; figure 1A*], it would have been obvious to one of ordinary skill in the art at the time the invention was made, to apply a non-linear function to each

normalized row reference count as taught by Kline. This would provide a more even distribution of row scores across the whole document and thus, allow an even distribution to represent scores on the scroll bar.

8-2. Regarding claim 33, Graham, McGee, Mohan, and Kline teach the claim with respect to claim 32, further comprising displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the non-linear normalized row reference count for corresponding rows in the file, by disclosing using a technique for analyzing the document to determine locations of user-specified concept of interest [*Graham, column 2, lines 10-19*] for the graphical representation [*Graham, column 2, lines 25-27*]. Since the relevance is determined as taught above, the attribute would be displayed based on the non-linear normalized row reference count for corresponding rows.

8-3. Regarding claim 34, Graham, McGee, Mohan, and Kline teach the claim with respect to claim 32, wherein the non-linear function is a square-root function [*Kline, page 23, number 5*].

Response to Arguments

9. The Examiner acknowledges the Applicant's amendments to claims 1, 7, and 35-37. Regarding independent claims 1 and 35-37, the Applicant alleges that Nielsen (U.S.

Patent No. 6,339,437 B1), Davis (Pub. No. US 2005/0091604 A1), and Mohan et al (U.S. Patent No. 6,970,881 B1), as described in the previous Office action, do not explicitly teach the claims as amended. Examiner has therefore rejected independent claims 1 and 35-37 under 35 U.S.C § 102(e) as being anticipated by Graham (U.S. Patent No. 7,228,492 B1). Applicant's arguments with respect to claims 1 and 35-37 have been considered but are moot in view of the new grounds of rejection.

Applicant states that dependent claims 3-34 and 38 recite all the limitations of the independent claims, and thus, are allowable in view of the remarks set forth regarding independently amended claim 1. However, as discussed above, Graham is considered to teach claim 1, and consequently, claims 3-34 and 38 are rejected.

Conclusion

10. The prior art made of record on attached form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R § 111(c) to consider these references fully when responding to this action. The documents cited therein teach similar systems for displaying relative emphasis in a file.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN H. TAN whose telephone number is (571)272-8595. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kieu Vu can be reached on 571-272-4057. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHT
Assistant Examiner
Art Unit 2173

/Tadesse Hailu/
Primary Examiner, Art Unit 2173